

REMARKS

In the Office Action, the Examiner objected to the claims 4 – 5, rejected claims 1, 2, 9, 15 and 19 – 22 as anticipated by Kang, rejected claims 3 – 7 and 23 as anticipated by Lowes et al., indicated that claims 1- 14 and 16 – 18 are directed to allowable subject matter but objected to as dependent on a rejected base claim, and cited additional art of record. The official draftsperson's review is noted.

Claim Objections

The claims 4 and 5 have been canceled without prejudice, so that the objection is thereby overcome.

35 USC 102(b)

Applicant submits that the **Kang** reference does not disclose the claim features (b) in column 2, line 57 to 65 and does not disclose the features (c) and (d) in figure 6. Kang clearly discriminates between the disclosure of lines 57 to 65 of column 2 and the invention described in figure 6. In particular, Kang states between column 2, line 66, and column 3, line 21, that in contrast to the method previously described, the source image (200x200 dpi) is not directly converted to a 600x600 dpi target image, but this is done in several steps S20, S40, S50 and S60. Therefore, it is obviously not proper to combine the disclosure of the previous mentioned example with the disclosure of figure 6.

Furthermore, Kang does not disclose the portion of feature (c) of the present claim 1 namely to use each digital source data for smoothing the target data to be dependent from nil neighboring source data. Reference step 40 of figure 6 (in Kang) provides smoothing but does not disclose all steps of the claimed feature (c).

With respect to feature (d), Applicant submits that the rejection is in error on two issues. First, Kang does clearly not disclose that scaling and smoothing are performed in a common processing step. By contrast, figure 6 clearly teaches two processing steps, namely step 30 for scaling and step 40 for smoothing. This is not a common processing step. The two-step method according to Kang is indicated in Figure 1 of the present patent application and the respective description on page 3, lines 8 to 14. Second, Kang does not disclose that target data is smoothed in the raster of the source data. As is obvious from figure 6, input data are first doubled in resolution in step S30 before the smoothing step 540 is processed. Therefore, smoothing clearly is established at the intermediate resolution image which has double input resolution and not - according to the present invention - in the source raster.

Applicants assert that the Claim 3 is not anticipated by **Lowe** et al. Lowe does not disclose figure (c) as alleged in the office action. First, Lowe does not disclose that smoothing is performed in the raster of the digital source data. In contrast, Lowe teaches to perform smoothing and upscaling a telefax image by filling in additional lines, see Lowe column 1, line 39 to 48. Smoothing is performed in the raster of the target image (300 dpi), whereas the data of the present invention are smoothed in the raster of the source data (98 LPI or 196 LPI in the example of Lowe). This difference will also be clear from the disclosure of Lowe on column 2, lines 29 to 35, where it is stated "... are smoothed by the choice of pixel images within the added spacing rows," and from the comparison of figures 1 A, 1 B to 4A, 413 in which it is evident that smoothing is performed in the raster of the dots which are intermediate to the lines of the source images (figure 1A, 2A, 3A, 4A). In addition, it is clear from figures 7A to 7D that the smoothing rules which are supplied by "OR" and "AND" operators are performed in the raster (0... 16) of the target image. Furthermore with

respect to figure 7, Lowe states on column 5, lines 24 to 27 that the rounding and smearing logic which correspond to the smoothing operation effects the output pixel image, which is in the target raster.

Furthermore, Lowe does not teach the sub-feature of feature (c) that smoothing and scaling are performed in one processing step. The examiner may argue that on column 1, lines 43 to 47, it is stated that various predefined rules are comprehended by the scaling/smoothing algorithm and that this portion may be interpreted that only one scaling/smoothing algorithm is applied. However, this portion may also be interpreted in that there are two process steps which perform scaling and smoothing. Indeed Applicant has not located a single portion in Lowe stating that scaling and smoothing is performed in one single step, but instead found various portions and embodiments which use at least two steps for scaling and smoothing. First, with respect to figure 5, Lowe teaches on column 3, lines 18 to 20, that the resolution-multiplying and smoothing steps (in plural) do not affect the output pixel rows.

Finally, Lowe describes his invention on column 9, lines 20 to 45, in three steps, whereby the second step comprises expanding the receiving image along a given axis to multiply the first pixel resolution, i.e. to scale the image and whereby in a third step which is separated from the second step the expanded image is filled in, which preferably includes smoothing. Therefore, according to the disclosure of Lowe, smoothing is performed as a separate step to scaling.

Thus, the invention as defined in the claims is not anticipated by the cited references and as such withdrawal of the rejection is respectfully requested.

Allowable Claims

Applicant notes with appreciation the indication of allowable subject matter in claims 10-14 and 16 - 18.

Additional Art

The additional art cited but not relied upon is noted.

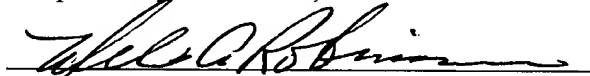
Prior Art of the Information Disclosure Statement

Applicant notes that the Examiner has not initialed the two listed publication references shown on the form 1449 as submitted with the disclosure statement filed May 30, 2000. Applicant requests that the Examiner consider such two references and provide an initialed copy of the form 1449 with the next communication.

Conclusion

Applicant respectfully requests favorable reconsideration and allowance of the present application.

Respectfully submitted,



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